Electric motor excited by the use of permanent magnets, particularly for inner rotor or outer rotor motor

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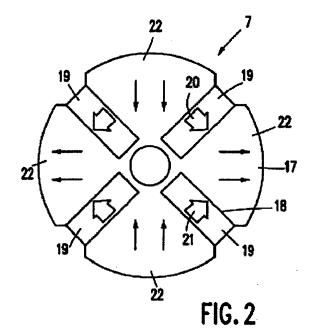
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Abstract of EP0691727

The motor, particularly an internal or external rotor motor, is energised by means of permanent magnets (7). The motor has motor parts (6,7) movable relative to each other. One of these parts forms a multiple pole exciting field in an air gap, by means of permanent magnets (7). The other motor part has a coil configuration (9) in this air gap. The coil configuration (9) is free from magnetic material. The permanent magnet excited motor parts comprises a cylindrical yoke (17). THis has radial slits (18,18a) uniformly distributed around its circumference. Permanent magnets (19) are arranged in these slits (18,18a) and are magnetised in the circumferential direction with the direction of magnetisation alternating from magnet to magnet. The yoke (17) is made of isotropic permanent magnet material. This is magnetised radially in the yoke sections (22) between the permanent magnets (19) in the slits (18, 18a) such that the resulting magnetic field in the air gap (12) has the same polarity as the magnetic field generated in the slits (18, 18a) by the permanent magnets (19). The permanent magnets (19) in the slits (18, 18a) are made of anisotropic permanent magnet material.



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